DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023999 Address: 333 Burma Road **Date Inspected:** 22-May-2011

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes An Qing Xiang No Yes N/A **Rod Oven in Use:** Yes **Inspected CWI report:** No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component: OBG** Components

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

NDT

Outside Yard – OBG Trial Assembly

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 09211.

Ultrasonic Testing (UT).

This QA inspector performed UT of approximately 10 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3013M-093, 099, 117, 123, 129, 135, 141, 147, 153, 159, 165, 171, 177, 182, 187, 197, 092, 098, 104, 116, 122, 128, 134, 140, 152, 158, 164, 089, 095, 101, 107, 113, 119, 125, 131, 137, 143, 149, 155, 161, 167, 176, 181, 186, 196, 173, 178, 183, 188, 193.

WELDING

This QA Inspector observed the following work in progress:

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Outside Yard – OBG Trial Assembly

This QA Inspector observed ZPMC qualified welding personnel identified as 046769 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam to Anchor plate weld at panel point 125 of OBG Segment 14W. Weld joint is identified as SEG3020V-037/038. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040611 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam to Anchor plate weld at panel point 125 of OBG Segment 14W. Weld joint is identified as SEG3020V-099. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066361 perform repair welding by Shielded Metal Arc Welding (SMAW), on Top Anchor plate to Vertical Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020U-591. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per Critical welding repair report B-CWR2943 R1.

This QA Inspector observed ZPMC qualified welding personnel identified as 050038 perform welding by Shielded Metal Arc Welding (SMAW), on Sub Assembly part SA3409 at panel point 127.3 of OBG Segment 14W. Weld joint is identified as SA3409-001-074. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified NDT personnel perform Ultrasonic Testing on Deck panel diaphragm to Floor beam weld at panel point 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020D-038 and SEG3020E-001. A Total of 4 Class A indications and 5 Class A indications were found on weld SEG3020D-038 and SEG3020E-001 respectively. See attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye, Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer